Claims

What Is Claimed Is:

1. A transport system including at least one product carrier which is adapted to be moved along a slide way by means of a linear motor drive unit comprising:

a primary part;

a secondary part;

wherein the product carrier is provided with a substantially flat base plate for transporting objects;

wherein that the primary part is arranged on a vehicle and associated with the slide way of the secondary part, said vehicle being adapted to be coupled to the base plate.

2. A transport system according to claim 1 wherein the primary part is arranged on the lower surface of said base plate.

3. A transport system according to claim 1 wherein the primary part is arranged in the base plate such that it is at least partially embedded therein.

4. A transport system according to claim 1, wherein the linear motor drive unit is a synchronous motor

5. A transport system according to claim 1 wherein the product carrier is adapted to carry a voltage supply unit.

6. A transport system according to claim 5 wherein the voltage supply unit is arranged in the base plate.

7. A transport system according to claim 5 wherein the slide way is formed by a pair of slide rails held in spaced relationship with one another by a plurality of support sections set up substantially vertically on a foundation.

8. A transport system according to claim 7 wherein a cover section is arranged between the support sections.

9. A transport system according to claim 8 wherein the secondary part is arranged on the cover section along the slide way.

10. A transport system according to claim 7 wherein the base plate is guided along the slide rails along its longitudinal edges

11. A transport system according to claim 7 wherein the base plate has longitudinal edges and wherein said base plate is guided along the slide rails along its lower surface adjacent said longitudinal edges.

12. A transport system according to claim 1 wherein elements are arranged between said base plate and the slide way for guiding the base plate; said elements selected from the group consisting of roller elements, spherical elements, guide elements, and friction-reducing means.

13. A transport system according to claim 1 further including a position determination unit arranged between the product carrier and the slide way.

14. A transport system according to claim 1 wherein the product carrier is provided with onboard electronics which communicate with a central station so as to exchange data and/or instructions therewith.

15. A transport system according to claim 8 wherein bus lines are arranged on the product carrier so as to exchange data and/or instructions with the cover section.

16. A transport system according to claim 1 wherein the product carrier is provided with display means

17. A transport system according to claim 1 wherein the product carrier is provided with interrogation means

18. A transport system according to claim 1 wherein the product carrier is provided with input means.

19. A transport system according to claim 1 wherein the vehicle is adapted to be moved along a separate vehicle slide way extending below the base plate.

20. A transport system according to claim 19 wherein the slide way is formed by a pair of slide rails held in spaced relationship with one another by a plurality of support sections set up substantially vertically on a foundation; wherein a cover section is arranged between the support sections; and wherein the vehicle slide way is formed in the cover section.

21. A transport system according to claim 1 further comprising a voltage supply unit arranged in or on the vehicle.

22. A transport system according to claim 20, wherein the vehicle slide way is implemented in the cover section as a substantially U-shaped slide-way groove which is open at the top in the direction of the base plate.

23. A transport system according to claim 22 further comprising a releasable coupling means arranged between the vehicle and the base plate.

24. A transport system according to claim 23 wherein the slide-way groove is adapted to be covered by a cover having formed therein a slot which extends in the direction of movement of the vehicle and which permits the coupling means to extend therethrough.

25. A transport system according to claim 1 further comprising an adjustable rotary plate rotatably supported on the base plate.

26. A transport system according to claim 25 further comprising a linear rotary drive unit for rotating the rotary plate disposed between said rotary plate and the base plate:

27. A transport system according to claim 1 further including a brake means for the product carrier arranged on said slide way at least in the area of work stations along the slide way.

28. A transport system according to claim 27 wherein the vehicle slide way includes at least one return section for returning vehicles, which have been decoupled from the base plate, to a return location.